SPECIFICATION

Please number the paragraphs following paragraph [0032] and re-number paragraph [0033] as follows:

-- [0033] Light sources 348 and 346 can also be implemented as light sources which generate laser light beams. An example of such a laser light source is a Vertical Cavity Surface Emitting Laser (VCSEL). A VCSEL is a type of edge emitting laser where light is emitted from the edge of a monolithic structure of semiconductor layers. A laser structure is a "VCSEL" where the light is emitted from the surface of the monolithic structure of semiconductor layers. Vertical cavity surface emitting lasers are very desirable light sources for high speed laser printing, optical fiber communications, optical sampling and other applications. VCSELs have several advantages over edge emitting lasers including an emitted beam with a small angular divergence, a circular, anastigmatic beam and ease of fabrication into one or two dimensional arrays.

[0034] Vertical cavity surface emitting lasers generally include a planar multi-layered semiconductor structure having one or more active semiconductor layers bounded at opposite semiconductor layers that act as mirrors. The semiconductor layers on one side of the active layer in the structure are doped with impurities so as to have an excess of mobile electrons. These layers with excess electrons are said to be n-type, i.e. negative. The semiconductor layers on the other side of the active layer in the structure are doped with impurities so as to have a deficiency of mobile electrons, therefore creating an excess of positively charged carriers called holes. These layers with excess holes are said to be p-type, i.e. positive.

[0035] An electrical potential can be applied through electrodes between the p-side and the n-side of the layered structure, thereby driving either holes or electrons or both in a direction perpendicular to the planar layers across the p-n junction so as to "inject" them into the active layers, where electrons recombine with holes to produce light. Optical feedback provided by the opposite semiconductor layers allows resonance of some of the emitted light to produce coherent "lasing" through either the top surface or the bottom surface of the semiconductor laser structure. Thus, for example, light sources 302, 306, 310, 314, 318, 322, 326, 330, 336, 340, 348 and 344 depicted in FIG. 2 can each be implemented as a VCSEL or an LED or another type of laser source or light source, depending upon design considerations.

[0036] An example of a VCSEL that can be adapted for use with one embodiment is disclosed in U.S. Patent No. 6,304,588, "Method and structure for eliminating polarization instability in laterally-oxidized VCSELs," which is assigned to the Xerox Corporation and issued to Chua, et al on October 16, 2001. Another example of a VCSEL that can be adapted for use with another embodiment is disclosed in U.S. Patent No. 6,552,328, "Microsensor including a VCSEL and method for electro-mechanical coupling of microsensors," which is assigned to the Xerox Corporation and issued to Berlin, et al. on April 22, 2003. A further example of a VCSEL that can be adapted for use with an alternative embodiment is disclosed in U.S. Patent No. 6,515,308, "Nitride-based VCSEL or light emitting diode with p-n tunnel junction current injection," which is assigned to the Xerox Corporation and issued to Kneissl, et al. on February 4, 2003. U.S. Patent Nos. 6,304,588, 6,552,328, and 6,515,308 are incorporated herein by reference.

~~[0033]~~ [0037] It can be appreciated that various other alternatives, modifications, variations, improvements, equivalents, or substantial equivalents of the teachings herein that, for example, are or may be presently unforeseen, unappreciated, or subsequently arrived at by applicants or others are also intended to be encompassed by the claims and amendments thereto. --